

REMARKS/ARGUMENTS

Claim Objections

Claims 1 and 4-9 were objected for various informalities. The Applicant agrees and amended the claims by removing periods after the sub-steps.

35 USC § 112, second paragraph

Claims 1-9 were rejected under 35 USC § 112, second paragraph, as being indefinite for various reasons. The Applicant agrees and amended claim 1 by removing the term "in particular its 3'-end", amended claim 2 by removing the terms "first nucleic acid probes", "various HPV specific capture probes", and "the glass support", and amended claim 3 by removing the term "another HPV sequence".

35 USC § 102(b)

Claims 1, 3-5, and 8-9 were rejected under 35 USC § 102(b) as being anticipated by Manos et al. (U.S. Pat. No. 5,182,377). The Applicant respectfully agrees and amended claim 1 to distinguish the amplification step. As the newly added sequences were not taught by Manos, claims 1, 3-5, and 8-9 should not be considered anticipated by Manos. Newly added dependent claims 10-13 rely on the same limitations as amended claim 1 and should therefore also not be considered anticipated by Manos. With respect to Manos' teaching of horseradish peroxidase, the applicant notes that the enzyme is a signal generator, but not a signal enhancer.

Added independent claim 14 and dependent claims 15-17 recite specific sequences and sequence conditions that are not taught by Manos. Therefore, claims 14-17 should also not be considered anticipated by Manos.

35 USC § 103

Claims 2, 6, and 7 were rejected under 35 USC § 103 as being obvious over Manos et al. in view of Fodor (U.S. Pat. No. 5,925,525). With respect to the claims as previously pending, the applicant agrees.

Amended claim 1 and claims 2-4 should not be considered obvious over Manos (alone or in combination with Fodor) as neither reference teaches or suggests the use of the specified sequences for detection of HPV. Significantly, Manos teaches away from the subject matter as presently claimed by pointing out that the E1 region is highly conserved and that therefore typing using other regions would be more readily accomplished (column 15, line 15 et seq.). On this background, the person of ordinary skill in the art is disincentivized to use E1 regions in the analysis as there would be no expectation of success, especially where a large number of HPV genotypes should be scanned. Amended claim 2 further focuses on specific E1 regions for capture, none of which are suggested or motivated by Manos. As amended claim 3 still requires all of the above elements of amended claim 1, amended claim 3 should remain non-obvious over the cited art. The same considerations apply for the kits of claim 4.

With respect to added claims 10-13, it should be noted that there is nothing in the prior art that the applicant is aware of that would teach or suggest analysis of certain HPV risk groups and/or genotypes using E1 sequences, let alone selected E1 sequences as claimed.

Similarly, added claim 14 should not be deemed obvious as this claim again relies, *inter alia*, on association and analysis of numerous HPV genotypes in an otherwise known as highly conserved area of HPV genome. Such methods are therefore particularly unexpected, especially as such methods rely on the specific sequences of recited in claims 14-17.

REQUEST FOR ALLOWANCE

The applicant believes that the present claim amendments are sufficient to overcome the Examiner's concerns and believes that the claims as amended are now in condition for allowance. Therefore, the applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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